

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

June 3, 2015

James Malandrinos President Industrial Power Services Corp. P.O. Box 150 Ware, MA 01082

Re: 310 CMR 7.00 – APPENDIX C

Appl. #WE-14-031; Trans. #X260630

RENEWAL OPERATING PERMIT

At: Industrial Power Services Corp.

Granby Landfill Gas-to-Energy Facility

11 New Ludlow Road Granby, MA 01033

Dear Mr. Malandrinos:

In accordance with 310 CMR 7.00—APPENDIX C(6) of the Air Pollution Control Regulations ("the Regulations"), the Department of Environmental Protection ("Department") is forwarding to EPA the attached FINAL Operating Permit (Renewal) for the Industrial Power Services Corporation facility located at 11 New Ludlow Road in Granby, Massachusetts.

Public notice of the Draft Operating Permit was published by the Department in the Springfield Union News/Sunday Republican on November 21, 2014 and in the Environmental Monitor on November 24, 2014, in accordance with the requirements of 310 CMR 7.00: Appendix C. As such, the public comment period ended on September 26, 2014. During that period, no comments were received. No public hearing was requested pursuant to 310 CMR 7.00: Appendix C(6)(f).

On February 17, 2015, the MassDEP forwarded to EPA Region 1, via electronic mail, the Proposed Operating Permit for this facility. EPA did not object or comment on the Proposed Operating Permit. Therefore, the MassDEP is issuing the Final Operating Permit.

The attached FINAL Operating Permit contains all of the federal and state air pollution control requirements, to which the facility is subject, and the terms and conditions for compliance with such applicable requirements.

If you have any questions concerning this FINAL Operating Permit, please contact Todd Wheeler of the Western Regional Office at (413) 755-2297.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Marc Simpson Air Quality Permit Chief Western Region

ecc: Donald Dahl, USEPA Region 1 Peter Czapienski, MassDEP, WERO Yi Tian, MassDEP, Boston Marc Wolman, MassDEP, Boston



Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]:

Industrial Power Services Corp. P.O. Box 150 Ware, MA 01082

FACILITY LOCATION:

Industrial Power Services Corp. Granby Landfill Gas-to-Energy Facility 11 New Ludlow Road Granby, MA 01033

NATURE OF BUSINESS:

Electric Power Generation from Landfill Gas

RESPONSIBLE OFFICIAL:

Name: James M. Malandrinos

Title: President

INFORMATION RELIED UPON:

Application No. WE-14-031 Transmittal No. X260630

FACILITY IDENTIFYING NUMBERS:

AQ ID: 0420105 FMF FAC NO.: 336356 FMF RO NO.: 342344

Standard Industrial Classification (SIC):

4911 – Electric Services

North American Industrial Classification System (NAICS): 221119 (other electric power generation)

FACILITY CONTACT PERSON:

Name: James M. Malandrinos

Title: President

Phone: (413) 967-7415 Email: ips1@verizon.net

This Operating Permit shall expire on 06/02/2020.

For the Department of Environmental Protection
This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Michael Gorski Regional Director

Department of Environmental Protection Western Regional Office 06 / 02 / 15

Date

TABLE OF CONTENTS

Section	Special Conditions for Operating Permit	Page No.
1	Permitted Activities and Description of Facility and Operations	3
2	Emission Unit Identification – Table 1	4
3	Identification of Exempt Activities – Table 2	5
4	Applicable Requirements	
	A. Operational and/or Production Emission Limits and Restrictions – Table 3	6
	B. Compliance Demonstration	
	- Monitoring and Testing Requirements – Table 4	8
	- Record Keeping Requirements - Table 5	9
	- Reporting Requirements – Table 6	10
	C. General Applicable Requirements	11
	D. Requirements Not Currently Applicable -Table 7	11
5	Special Terms and Conditions – Table 8	12
6	Alternative Operating Scenarios	13
7	Emissions Trading	13
8	Compliance Schedule	13
Section	General Conditions for Operating Permit	
9	Fees	14
10	Compliance Certification	14
11	Noncompliance	15
12	Permit Shield	15
13	Enforcement	16
14	Permit Term	16
15	Permit Renewal	16
16	Reopening for Cause	17
17	Duty to Provide Information	17
18	Duty to Supplement	17
19	Transfer of Ownership or Operation	17
20	Property Rights	18
21	Inspection and Entry	18
22	Permit Availability	18
23	Severability Clause	18
24	Emergency Conditions	18
25	Permit Deviation	19
26	Operational Flexibility	20
27	Modifications	20
28	Ozone Depleting Substances	21
29	Prevention of Accidental Releases	22
Section	Appeal Conditions for Operating Permit	23

SPECIAL CONDITIONS FOR OPERATING PERMIT

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

A. DESCRIPTION OF FACILITY AND OPERATIONS

The Industrial Power Services Corporation (hereinafter "IPSC") is a landfill gas-to-energy plant located at the Granby Landfill site on New Ludlow Road in Granby. The Facility consists of eight (8) spark ignited ("SI"), Caterpillar internal combustion engines which are lean burn, turbo charged and suitable for low pressure landfill gas ("LFG"). The Facility also utilizes a candlestick flare. The engines and flare are designed to destroy methane and non-methane organic compounds in the LFG. All eight engines can be operated simultaneously if sufficient gas is present and will produce electrical power for transfer to the grid. The candlestick flare is utilized when less than 300 standard cubic feet per minute ("scfm") LFG is available for consumption after the engines are online or alone.

Several approvals were issued to the facility for the installation and operation of the engines and the flare. The last Approval #1-P-06-020 dated 06/23/06 was for the eighth engine, which made the facility a major source for CO. The facility is not a major Hazardous Air Pollutant ("HAP") source. The eight SI engines are subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines; hereinafter ("NESHAP for Stationary RICE"). In accordance with 40 CFR §63.6603 and 63.6640, non-emergency, non-black start stationary RICE which combust landfill or digester gas equivalent to 10 percent or more of the gross heat input on an actual basis must comply with the requirements in Table 2d to Subpart ZZZZ of 40 CFR 63 for existing stationary RICE located at area sources of HAP emissions.

Table 1 lists the equipment (emission units or EUs) subject to this Operating Permit. Table 2 describes the exempt activities that are not mentioned further in the Operating Permit. Tables 3, 4, 5 and 6 describe the applicable requirements that the EUs are subject to in the Operating Permit. Table 7 contains the requirements that are not currently applicable, which includes the requirements of 40 CFR Part 64: Compliance Assurance Monitoring (CAM) since the facility does not have an emission unit using control equipment to achieve compliance that has pre-control emissions of at least 100 percent of the major source amount for any applicable regulated air pollutant.

2. <u>EMISSION UNIT IDENTIFICATION</u>

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

	Table 1			
EU	Description of EU	EU Design Capacity (Input Rating)	Pollution Control Device (PCD)	
	1 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
EU 1	2 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
	3 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
	4 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
	5 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
EU 2	6 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
	7 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
	8 – Caterpillar SI Engine – Model #3412	5.05 MMBtu/hr	none	
EU 3	Candlestick Flare	9 MMBtu/hr	n/a	

Table 1 Key

EU = Emission Unit PCD = Pollution Control Device

MMBtu/hr = Million British Thermal Units per hour

SI = Spark Ignition

= Number

3. <u>IDENTIFICATION OF EXEMPT ACTIVITIES</u>

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2		
Description of Current Exempt Activities	Reason	
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00:Appendix C(5)(h)	

4. <u>APPLICABLE REQUIREMENTS</u>

A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3 below:

	Table 3a					
EU	Fuel/Raw Material	Pollutant	Emissions Limits/Stan	dards ⁽¹⁾⁽²⁾	Restrictions (3)	Applicable Regulation and/or Approval No.
		NO_X	0.9 g/bhp-hr	1.16 lb/hr	5.08 TPY	
EU 1		CO	2.5 g/bhp-hr	3.22 lb/hr	14.10 TPY	
		NMOC	20 ppm ⁽⁴⁾ or reduce 98% by weight	0.24 lb/hr	1.05 TPY	
	Landfill Gas	SO_2	500 ppm	0.99 lb/hr	4.34 TPY	Approval #1-B-00-027 (12/08/00)
		PM	48 lb/MM dscf of CH4	0.86 lb/hr	3.77 TPY	
		Opacity	0% opacity (no visible emissions) with exception of 5 minutes during startup. During startup visible emissions shall comply with the provisions of 310 CMR 7.06.			
		NO_X	0.6 g/bhp-hr	0.77 lb/hr	3.37 TPY	
EU 2	Landfill Gas	CO	2.5 g/bhp-hr	3.22 lb/hr	14.10 TPY	
		NMOC	20 ppm ⁽⁴⁾ or reduce 98% by weight	0.24 lb/hr	1.05 TPY	Approval #1-B-03-006 (4/30/03)
		SO_2	500 ppm	0.99 lb/hr	4.34 TPY	Approval #1-P-06-020 (6/23/06)
		PM	48 lb/MM dscf of CH4	0.86 lb/hr	3.77 TPY	
		Opacity	0% opacity (no visible emissions) with startup visible emissions shall contain the startup visible emissions shall contain the startup visible emissions shall contain the startup visible emissions of the startup visible emissions.			

	Table 3b				
EU	Fuel/Raw Material	Pollutant	Emissions Limits/Standards (1)	Restrictions (3)	Applicable Regulation and/or Approval No.
		NO_X	0.06 lb/MMBtu	2.37 TPY	
EU 3		CO	2.5 lb/MMBtu	5.91 TPY	
		NMOC		7.31 TPY	
	Landfill Gas	SO_2		6.52 TPY	Approval #1-B-03-006 (4/30/03)
		PM	48 lb/MM dscf of CH4	5.68 TPY	
		Opacity	0% opacity (no visible emissions) with exception startup visible emissions shall comply with		
Facility- wide		Greenhouse gas ⁽⁵⁾		N/A	310 CMR 7.71 (state only)

Table 3 Key:

EU = Emission Unit Lb/MMBtu = pounds per Million British Thermal Units

CO = Carbon Monoxide g/bhp-hr =grams per brake horsepower

 $PM = Total \ Particulate \ Matter \qquad \qquad for \ one \ hour \ (engine \ output)$ $NO_X = Nitrogen \ Oxides \qquad \qquad lbs/hr = pounds \ per \ hour$ $SO_2 = Sulfur \ Dioxide \qquad \qquad ppm = parts \ per \ million$

NMOC = Non-Methane Organic Compounds HAP (total) = total Hazardous Air Pollutants.

CH4 = Methane % = percent

TPY = tons per consecutive 12-month period 2 \leq = less than or equal to lbs/MM dscf = pounds per Million dry standard cubic feet lbs/hr = pounds per hour

Table 3 Foot Notes:

- 1. Emission Limits expressed as pounds per hour (lb/hr) and pound per million Btu (lb/MMBtu) are based on a one-hour average.
- 2. The lb/hr and "g/bhp-hr" emission limits are "per engine" limits and do not apply during conditions of startup, shutdown or malfunction.
- 3. Emission limits expressed as tons per year (TPY) are based on a rolling 12-month total for each engine. To calculate the amount of a consecutive 12 month rolling period, take the current calendar month and add it to the previous 11 calendar months total amount.
- 4. Parts per million as hexane, by volume, dry basis at 3 percent oxygen or less.
- 5. Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the department may reasonably anticipate will cause or contribute to climate change including, but not limited to, CO₂, CH₄, N₂O, SF₆, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

	Table 4
EU	Monitoring And Testing Requirements
EU 1 EU 2	IPSC shall 1. In accordance with Approvals #1-B-00-027 (12/08/00), 1-P-03-006 (04/30/03), and 1-P-06-020 (06/23/06), construct the engines to accommodate the emission testing requirements contained in 40 CFR Part 60 Appendix A.
	2. In accordance with 310 CMR 7.13, if and when MassDEP determines that Emission Compliance Testing (Stack Testing) is necessary to ascertain compliance with MassDEP's regulations or design approval provisos, cause such stack testing:
	a. To be conducted by a person knowledgeable in stack testing.b. To be conducted in accordance with procedures contained in a test protocol approved by MassDEP,c. To be conducted in the presence of a representative of MassDEP when such is deemed necessary.
	All such testing shall be conducted in accordance with 310 CMR 7.13, and in accordance with the applicable procedures specified in 40 CFR 60 Appendix A or other method(s) if approved by MassDEP and EPA.
	3. In accordance with 310 CMR 7.13(2), if and when MassDEP determines that stack testing (to ascertain the mass emission rates of air contaminants emitted under various operating conditions) is necessary for the purposes of regulation enforcement or determination of regulation compliance, cooperate with MassDEP to provide:
	 a. Entrance to a location suitable for stack sampling, b. Sampling ports at locations where representative samples may be obtained, c. Staging and ladders to support personnel and equipment performing tests, d. A suitable power source at the sampling location for the operation of sampling equipment, and e. Such other reasonable facilities as may be requested by MassDEP.
	4. In accordance with Approvals #1-B-00-027 (12/08/00), 1-P-03-006 (04/30/03), and 1-P-06-020 (06/23/06), monitor the LFG Facility for the following parameters:
	a. LFG usage; andb. Fuel flow in scfm and total standard cubic feet; andc. Equipment malfunctions.
	5. Monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.
Facility- wide	6. In accordance with 310 CMR 7.71(1) and Appendix C(9) establish and maintain data systems or record keeping practices (e.g. fuel use records, SF ₆ usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6. (State only requirement)

Table 4 Key:

EU = Emission Unit LFG = Land Fill Gas MassDEP = Massachusetts Department of Environmental Protection EPA = Environmental Protection Agency

	Table 5
EU	Record Keeping Requirements
EU 1 EU 2	IPSC shall 1. In accordance with Approvals #1-B-00-027 (12/08/00), 1-P-03-006 (04/30/03) and 1-P-06-020 (06/23/06), establish and maintain a record keeping system on site for the following:
	 a. A record of routine maintenance activities performed on each engine including a description of the maintenance performed and the date the work was completed;
	b. A record of all malfunctions for each engine including the date and time of the malfunction, the type of malfunction and the date and time corrective actions were completed.
	2. In accordance with 310 CMR 7.00 Appendix C(9)(b), maintain records of landfill gas flow in scfm.
	3. In accordance with 310 CMR 7.00 Appendix C(9)(b), maintain records of total standard cubic feet to all engines combined and the air to fuel ratio for each engine to demonstrate that the engine is being operated in accordance with the NO _X /CO optimization plan.
	4. In accordance with Approvals #1-B-00-027 (12/08/00), 1-P-03-006 (04/30/03), and 1-P-06-020 (06/23/06), record the volume of LFG fired in each engine for each month and for each twelve month rolling period.
Facility- wide	5. In accordance with 310 CMR 7.00 Appendix C(10)(b), maintain record of all monitoring data and supporting information on-site for a period of at least five years from the date of the monitoring sample, measurement, report or initial operating permit application.
	6. Maintain records for the annual preparation for a Source Registration/Emission Statement Form as required by 310 CMR 7.12 and keep copies of Source Registration/Emission Statement Forms submitted annually to MassDEP as required by 310 CMR 7.12(3)(b) for five years from the date of submittal.
	7. In accordance with 310 CMR 7.71 (6) b. and c. retain at the facility for five years and make available to the Department upon request copies of the documentation of the methodology and data used to quantify emissions. (State only requirement)

Table 5 Key

EU = Emission Unit NOX = Oxides of Nitrogen CO = Carbon Monoxide LFG = Landfill Gas scfm = Standard Cubic Feet per Minute MassDEP = Massachusetts Department of Environmental Protection.

	Table 6a
EU	Reporting Requirements ⁽¹⁾
EU 1 EU 2	IPSC shall 1. In accordance with Approvals #1-B-00-027 (12/08/00), 1-P-03-006 (04/30/03), and 1-P-06-020 (06/23/06), submit the test report for any emissions testing to MassDEP within 45 days of completion of the emissions testing.
	2. In accordance with Approvals 1-B-00-027 (12/08/00), 1-P-03-006 (04/30/03), and 1-P-06-020 (06/23/06), notify MassDEP's Compliance Enforcement Chief for the Bureau of Waste Prevention by telephone or fax, within 24 hours, and with written notification within 10 days, after the occurrence of any upsets or malfunctions of the engines or any appurtenant equipment which result in excess emission to the ambient air and/or condition of air pollution.
Facility- wide	3. In accordance with 310 CMR 7.12, submit a Source Registration/Emission Statement form to MassDEP on an annual basis.
	4. In accordance with 310 CMR 7.13(1) and 310 CMR 7.13(2), if and when MassDEP has determined that stack testing is necessary to ascertain compliance with MassDEP's regulations or design approval provisions, IPSC shall cause such stack testing to be summarized, analyzed, and submitted to MassDEP within such time frame as agreed to in the approved test protocol.
	5. In accordance accordance with 310 CMR 7.00 Appendix C(10)(a), submit to MassDEP any record relevant to this Operating Permit or to the emissions of any air contaminant from the facility within 30 days of the request by MassDEP. In accordance with 310 CMR 7.00 Appendix C(10)(c), submit to MassDEP two compliance summaries, one by January 30 for the time period July – December of the previous calendar year, and the other by July 30 for the time period January – June of the current calendar year. (See Provision 10 in "GENERAL CONDITIONS FOR OPERATING PERMIT")
	6. In accordance with 310 CMR 7.13(1)(d), submit to MassDEP any stack test results for any air contaminant obtained from stack testing required by MassDEP within such time as agreed to in the approved test protocol.
	7. In accordance with 310 CMR 7.00 Appendix C(5)(b)9., submit annually a certification that the facility is maintaining the required records to assure the facility is in compliance with the applicable requirements designated in this permit. (See Provision 10 in "GENERAL CONDITIONS FOR OPERATING PERMIT")
	8. In accordance with 310 CMR 7.00 Appendix C(10)(a), submit to MassDEP any record relevant to this Operating Permit or to the emissions of any air contaminant from the facility within 30 days of the request by MassDEP or EPA.
	9. In accordance with 310 CMR 7.00 Appendix C(10)(f), the Permittee shall report to MassDEP's Regional Bureau of Waste Prevention all instances of deviations from permit requirements. (See Provision 25 in "GENERAL CONDITIONS FOR OPERATING PERMIT")
	10. In accordance with 310 CMR 7.71(5), by April 15 th , 2010 and April 15 th of each year thereafter report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles when stationary source greenhouse gas emissions are greater than 5,000 short tons CO ₂ e. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (State only requirement)
	11. In accordance with 310 CMR 7.71(6), certify greenhouse gas emissions reports using a form provided by the Department or the registry. (State only requirement)

	Table 6b
EU	Reporting Requirements ⁽¹⁾
Facility- wide	IPSC shall 12. In accordance with 310 CMR 7.71(7), by December 31 st of the applicable year submit to the Department documentation of triennial verification of the greenhouse gas emissions report. (State only requirement)

Table 6 Key

 $\begin{aligned} \text{MassDEP} &= \text{Massachusetts Department of} \\ \text{Environmental Protection} \end{aligned} &\qquad & \text{CMR} &= \text{Code of Massachusetts Regulations} \\ \text{CO}_2 e &= \text{Carbon Dioxide} \end{aligned}$

Table 6 Notes:

(1) The annual Source Registration/Emission Statement report shall be submitted to MassDEP office specified in the instructions. All other reports, including both 6-month summary reports, are to be submitted to the Western Regional Office.

C. GENERAL APPLICABLE REQUIREMENTS

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7	
Regulation	Reason
310 CMR 7.16: Reduction of Single Occupant Commuter Vehicle Use	Facility employs fewer than 250 employees
310 CMR 7.25: Consumer and Commercial Products	Not Applicable
42 U.S.C. 7401, §112(r): Prevention of Accidental Release	Facility does not store, use or process any of the listed compounds in quantities greater than thresholds.
42 U.S.C. 7401, §601: Stratospheric Ozone	Not Applicable
40 CFR Part 64: Compliance Assurance Monitoring	Facility does not have any emission units using control devices .

5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

	Table 8a
EU	Special Terms and Conditions
EU 1 EU 2	IPSC shall 1. In accordance with 40 CFR §63.6603 and §63.63.6640 IPSC must comply with the requirements in 40 CFR 63 Table 2d for existing stationary RICE located at area sources of HAP emissions:
	 a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first⁽¹⁾; b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
EU 3	The open flare shall be operated only on a supplemental basis to the landfill gas to energy facility and the enclosed flare and not as the primary landfill gas control system.
Facility- wide	3. In accordance with Approval #1-B-00-027 (12/08/00), #1-P-03-006 (04/30/03), and #1-P-06-020 (06/23/06) ensure that each engine and flare reduce NMOC emissions by 98% by weight, or reduce stack NMOC emissions to 20 parts per million as hexane by volume, dry basis, at three percent oxygen, or less.
	 4. In accordance with Approval #1-B-00-027 (12/08/00), #1-P-03-006 (04/30/03), and #1-P-06-020 (06/23/06), apply modern air pollution control technology with respect to noise. In no case shall the operation of the IPSC facility result in an exceedance of MassDEP's noise guidelines of: a. an increase in the broadband sound level by more than 10 dB(A) above ambient; or
	b. production of "puretone".
	These guidelines are contained in DAQC Policy 90-001. In addition, in no case shall the operation of the IPSC facility result in a condition of "Noise" as required by Regulation 310 CMR 7.10. [State Only]
	5. Keep a copy of the Standard Operating and Maintenance Procedures for the engines on site at all times.
	6. In accordance with Approval #1-B-00-027 (12/08/00), #1-P-03-006 (04/30/03), and #1-P-06-020 (06/23/06), take immediate steps, including shutdown of the engines, to abate any nuisance condition generated by the operation of the engines.
	7. In accordance with 310 CMR 7.01(1), should any nuisance condition(s) occur as a result of the operation, take appropriate steps immediately to abate said nuisance condition(s) [State Only]
	8. In accordance with 310 CMR 7.09, not cause or allow emissions of odor or dust that cause or contribute to a condition of air pollution [State Only]

EU	Special Terms and Conditions
Facility- wide	IPSC shall 9. In accordance with 310 CMR 7.10, not willfully, negligently, or through failure to provide necessary equipment service, or maintenance or take necessary precautions cause, suffer, allow, or permit unnecessary emissions from said source of sound that may cause noise. [State Only] MassDEP reserves the right to require additional measurement periods, locations, or events if in the opinion of MassDEP such additional measurements are necessary to determine the compliance with Air Pollution Control Regulations.
	10. Emission Units EU #1 & EU #2 are subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" [as indicated in Table"2d" to Subpart ZZZZ of 40 CFR 63]. Compliance with all applicable provisions therein is required.

Table 8 Key

EU = Emission Unit NMOC = Non-Methane Organic Compound

CFR = Code of Federal Regulations HAP = Hazardous Air Pollutant

RICE = Reciprocating Internal Combustion Engine % = Percent

Table 6 Notes:

(1) Sources have the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 ("NESHAP for Stationary RICE").

6. <u>ALTERNATIVE OPERATING SCENARIOS</u>

The Permittee did not request alternative operating scenarios in its Operating Permit application.

7. <u>EMISSIONS TRADING</u>

A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

B. INTER-FACILITY EMISSION TRADING

The Permittee did not request inter-facility emissions trading in its Operating Permit application.

8. <u>COMPLIANCE SCHEDULE</u>

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. FEES

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm#op.

A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Air Compliance Clerk, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

12. PERMIT SHIELD

- A. This facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.
 - Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.
- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.
- C. Nothing in this Permit shall alter or affect the following:

- 1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
- 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
- 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

14. PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

18. DUTY TO SUPPLEMENT

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This Permit is not transferable by the Permittee unless done in accordance with $310 \, \text{CMR} 7.00$: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit:
- B. have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The Permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. <u>SEVERABILITY CLAUSE</u>

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

24. EMERGENCY CONDITIONS

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based emission limitations specified in this Permit as a result of an emergency². In order to use emergency as an

¹ Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

² An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or

affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. the permitted facility was at the time being properly operated;
- C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this Permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone, by fax or by electronic mail (e-mail), within three (3) days of discovery of such deviation:

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- B. Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/agforms.htm#op.

This report shall include the deviation, including those attributable to upset conditions as defined in the

Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The Permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

- A. Administrative Amendments The Permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications The Permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2.,provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- C. Significant Modifications The Permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

28. OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

A. The Permittee shall comply with the standards for labeling of products using ozone-depleting

substances pursuant to 40 CFR Part 82, Subpart E:

- All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
- 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
- 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
- 4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
 - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
 - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
 - 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
 - 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
 - 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part82, Subpart A, "Production and Consumption Controls".
- D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

29. PREVENTION OF ACCIDENTAL RELEASES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

APPEAL CONDITIONS FOR OPERATING PERMIT

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts Department of Environmental Protection P.O. Box 4062 Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.